

the antealar protuberance around the base of the wings to the posterior angle and across the posterior portion of the mesonotum, and the scutellum, reddish; metanotum bluish, but on each side reddish. Abdomen metallic blue, with short yellowish pile. Halteres and legs reddish-yellow. Wings brownish, costal cells, the middle portion of the submarginal cell along the third longitudinal vein, basal third of the large basal cell, and the two smaller basal cells, yellowish; a small spot near the outer end and a line near the base of the discal cell, central portion of the first and all of the second and third posterior cells, the anal cell and alula brownish hyaline. Length 13 mill.

Two specimens, one of which is in the collection of the University of Kansas, were collected by the writer, at St. Augustine, Florida.

Rivellia floridana, n. sp.

(*Rivellia*, n. sp., Proc. Acad. Nat. Sci., Phila., 1895, p. 337.)

Head reddish, orbits narrowly margined with silvery-white; antennæ yellow. Thorax and scutellum red. Abdomen, first and second segments reddish, the others black; halteres reddish; legs yellow. Wings hyaline, veins yellow; crossbands brown or brownish yellow, and wider than *R. variabilis* and allied species; the first and second bands are very narrowly connected at the junction of the auxiliary and first longitudinal vein, second and third coalesce at or just below the fourth longitudinal vein (in the latter case there is a very small hyaline triangle, formed by the two bands and fourth longitudinal vein), and end in a point at the posterior margin near the junction of the fifth longitudinal and transverse vein; here also the first band obscurely coalesces with the first and second; the fourth or apical band narrowly separated or more narrowly connected with the third at the tip of the second longitudinal vein. Length 5 mill.

Four specimens were collected by the writer on Dayton Island, Lake George, Florida, May 9, 1894.

DESCRIPTION OF TWO NEW SPECIES OF TABANIDÆ.

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The limits of the subgenus *Atylotus* as restricted by Osten-Sacken are not easy to determine. The presence or absence of the ocelligerous tubercle is the character which gives most trouble, for in some species it seems to be absent in the female and present in the male, and one could convince himself without a great amount of imagination that in some species it is present in one specimen and absent in another of the same sex. The type of the subgenus is *bicolor*, and associated with it are other equally peculiar species whose characters place them at once in *Atylotus*. They are small forms in which the usual banding of the eyes is lacking, as are also the frontal callosity and subcallous. The wings are glassy, transparent, resembling those of some other Tabanids when teneral.

The following species of the group appear to be undescribed :

Tabanus pruinus, n. sp.

Length 10 mm. Colour black, opaque, the whole body having a pruinose appearance.

Female.—Front yellowish pollinose, clothed with rather short yellowish hair ; frontal callosity, subcallous and ocelligerous tubercle wanting ; face and cheeks yellowish pollinose and clothed with long white hairs ; palpi whitish ; antennæ yellowish, the first section of the third joint of medium width, gently convex below and prominent above ; eyes pubescent, unicolorous ; thorax dull black, clothed with long white hairs ; wings hyaline, marginal cell dilute yellowish ; coxæ and bases of all the femora black, tips of tarsi brown, remainder of legs yellowish ; dark hairs on all the legs have a tendency to make the legs appear dusky ; abdomen black, very sparingly red on the sides of the first two segments, and clothed with light hair, which usually is shorter than on the thorax.

Male.—Differs from the female in having the abdomen more broadly red on the sides—extending back on to the third segment.

Five males and three females taken in central and northern Ohio in June.

Tabanus thoracicus, n. sp.

Length 9 mm. Thorax gray pollinose, abdomen piceus, yellow on the sides.

Female.—Front yellowish pollinose, clothed with short yellow hairs ; frontal callosity and subcallous absent, occiput gray, face and cheeks yellowish gray pollinose, clothed with rather short hairs, some of which appear dark, almost black from some views ; antennæ yellow, first section of third joint narrow, as compared with *bicolor*, gently convex below, prominent above ; thorax gray, clothed with white hairs ; legs yellow ; all the femora darker at base, but this colouring is most apparent in the middle pair ; last joint of all the tarsi brown, tibiae and tarsi clothed with dark hairs, wings transparent, marginal cell and some of the longitudinal veins yellow ; abdomen above piceous, yellow on sides of the first four segments ; below a narrow, piceous stripe is present on the first three segments, on each side of this stripe the first two segments are plain yellow, and the apical part of the abdomen is variegated with piceous and yellow.

Male.—Differs from the female in having the basal half of all the femora dark, and less yellow on the venter of the abdomen.

Two females and a male collected at Oswego, N. Y., in August ; the property of the National Museum.

This species differs from *bicolor*, to which it is most closely related, in its colour, smaller size and more slender form, and in the striking difference in the form and width of the third antennal joint of the female.